MEDICAL THREAT BRIEFING
PAKISTAN

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OUTLINE

- Background
- Heat and Cold Injuries
- High Elevations
- Infectious Diseases
- Arthropod-borne Diseases
- Venomous Snakes
- Physical Injury
- Industrial Health Risks
- Mental Stress
- Predeployment
- During Deployment
- Post Deployment
- Summary

TURKMENISTAN
UZB.
TAJIKISTAN
CHINA
Gilgit
Kashmir
Peshāwar
ISLĀMĀBĀD
AFGHANISTAN
Rāwalpindi
Faisalābad
Lahore
Zhob
Quetta
Multan
Bahāwalpur
Nok Kundi
Indus
Sukkur
IRAN
INDIA
Ormāra
Hyderābad
Gwādar
Karāchi
Arabian Sea
0 150 300 km
0 150 300 mi

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Readiness Thru Health

PAKISTAN

- Roughly twice the size of California
- Population of 162,419,946 people
- Many languages spoken, 48% speak Punjabi, Urdu in Islamabad, English
- AFMIC lists as a HIGH RISK for infectious diseases
- Very poor sanitary conditions
- Contaminated surface water

CLIMATE AND GEOGRAPHY

- Mountainous in the north and northwest
- Islamabad: 1666ft (508m) above sea level
- Islamabad Averages
  - Temp: Oct 71F, Nov 60F, Dec 51F
  - Rainfall: Oct-Dec 20mm per month
- Minimum temperatures in the 40’s

EARTHQUAKE

- Epicenter near Islamabad in northern Pakistan, magnitude of 7.6
- Death toll has surpassed 35K
- More than 50K injured
- UN warns of disease outbreaks
- 2M Homeless

Heat and Cold Injuries

- Variable temperatures for day and night
- Important to know the heat category and to follow the work/rest cycle during the hot hours of the day
- Equally important to be prepared for sudden drops in temperature, particularly at night

Cold Weather Injury Prevention

- Hypothermia, Frostbite, Chilblains

COUNTERMEASURES

- When possible, remain inside warming tents/buildings and drink warm, uncaffeinated liquids for relief from the cold
- If working outside or on guard duty, insulate yourself from the ground and wind. Rotate duty as frequently as mission allows.
- Properly wear the Extended Cold Weather Clothing System

Heat Injury Prevention

- Heat Cramps, Exhaustion, or Stroke

COUNTERMEASURES

- Drink fluids continuously (hourly fluid intake should not exceed 1 1/2 quarts, daily fluid intake should not exceed 12 quarts)
- Maintain acclimatization
- Protect yourself from exposure to sunlight and wind
- Maintain good physical condition
- Establish work/rest schedules
- Wear proper clothing
- Participate in training

HIGH ELEVATIONS

- High Altitude-elevations over 6,000 feet
  - High Altitude illnesses can kill
  - Stage ascents over time
  - Environmental conditions are more severe at higher elevations
    - Lower oxygen levels (“thin air”)
    - Colder temperatures, high winds, low visibility
    - Ice, snow, rocks, avalanches
  - Remain well hydrated

Infectious Diseases

- Foodborne and waterborne diseases
- Sexually tran
- Rabies

Vector-borne Diseases

- Malaria
- Dengue fever
- Leishmaniasis

Mosquito-borne Diseases

- Malaria:
  - Transmitted by Anopheline mosquitoes
  - Both falciparum and vivax forms
- Dengue:
  - Transmitted by *Aedes* mosquitoes

Leishmaniasis

- Transmitted by sand flies
- Cutaneous form most prevalent

Venomous Snakes

- Cobras, Kraits, Pit Vipers are Common
- Avoidance and Caution are the Keys

PHYSICAL INJURY

- Injury was a top diagnosis following Hurricane Andrew
- Walking over and handling debris can cause cuts, scrapes, bruises, sprains, etc.
- Remain current with tetanus vaccination – revaccinate for a dirty wound if current vaccination is over 5 years old

INDUSTRIAL HAZARDS

- Industrial chemicals and fuel contamination of the soil and water
- Carbon monoxide poisoning from the burning of any fossil fuel without adequate ventilation
- Building material hazards: asbestos, lead based paint, etc
- Structural and electrical hazards
- Appropriate personnel protective equipment; may require respirator fit-testing

HANDLING BODIES OF VICTIMS

- Unburied human remains not a disease threat
- Cadavers in the water supply rarely transmit diseases.
- Increased number of filth flies can increase shigellosis.
- Mortuary staff, and body retrieval teams risk exposure to hepatitis B virus (HBV) and HIV
- For personnel exposed to blood and body fluids:
  - Use gloves when handling bodies or body fluids
  - Use eye protection, gowns, and masks when large quantities or splashes of blood are anticipated
  - Wash hands frequently
  - Use body bags to reduce the risk of contamination

RESISTANCE TO STRESS

- Remember the larger purpose of what you must do. You are providing care, giving hope, and preventing disease for the living. You are recovering the bodies for registrations and respectful burial.
- Limit exposure to the stimuli.
- Mask odors with disinfectants, deodorants, air-fresheners.
- AVOID FOCUSING on any individual victims.
- Have people who did NOT search the body examine any materials collected for identification of the body or intelligence.
- Remind yourself the body is not “the person,” just the remains.

RESISTANCE TO STRESS

- Keep humor alive
- Don’t desecrate or steal from the victims
- Schedule frequent breaks; maintain hygiene, drink plenty of fluids, and eat good food.
- Have your team get together for mutual support and encouragement.
- Help buddies or subordinates in distress by being a good listener.
- Prepare yourself for what you will see and do.
- Don’t feel guilty about distancing yourself mentally from the suffering of individuals.
- Don’t be disheartened by horrible dreams, feeling tense, or intrusive memories.
- Participate in a critical event debriefing with trained people from your supporting unit ministry and/or behavioral health/combat stress control team.

PREDEPLOYMENT

- Immunizations
- Passports
- Medications (Personal and Deployment)
  - Mefloquine or doxycycline
- Predeployment medical screening form
  - HIV test, TB test, G6PD
- Treating uniforms and bed nets with permethrin

DURING DEPLOYMENT

- DEET and bednet use a must
- Proper wear of uniform
- No approved local food sources
- Stay away from surface water sources
- Be aware of unsound structures, downed power lines, and other physical hazards

POST DEPLOYMENT

- Terminal malaria prophylaxis
  - Primaquine
- TB/HIV testing
- Post deployment medical screening form
- Mental health assessment

SUMMARY

- Background / Site Survey
- Infectious Disease
- Arthropod Borne Disease
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CONCLUSION

- By following personnel protective measures, utilizing the DOD arthropod repellant system, and following medical threat guidance the overall force health protection risks can be mitigated.

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QUESTIONS?

Readiness Thru Health